

(12) UK Patent Application (19) GB (11) 2 224 923 A (13)
(43) Date of publication 23.05.1990

(21) Application No 8827081.4

(22) Date of filing 19.11.1988

(71) Applicant

Metric Design Limited

(Incorporated in the United Kingdom)

1a Little Ees Lane, Sale, Cheshire, M33 5GT,
United Kingdom

(72) Inventor

Christopher William Ellis Rigby

(74) Agent and/or Address for Service

Michael John Ajello

38a Bramhall Lane South, Bramhall, Stockport,
Cheshire, SK7 1AH, United Kingdom

(51) INT CL⁴

A47B 96/06

(52) UK CL (Edition J)

A4B B1D B1X B5A7B B7C2B B7E7

(56) Documents cited

GB 2125685 A

(58) Field of search

UK CL (Edition J) A4B

INT CL⁴ A47B

(54) A display or storage system

(57) A display or storage system comprises spaced vertical channel members (10) which may be floor or wall mounted, horizontal slotted strips (14) located within forward opening slots (12) in the channel members (10) and shelves or like members (21) which locate within the horizontal slotted strips (14) and are prevented from inadvertent removal by the engagement of a raised rib (23) on the back of the shelf, behind a downwardly projecting retaining lip (22) inside the slotted strips (14). Locking members (18) prevent inadvertent removal of the slotted strips (14) from the vertical members (10). The shelves (21) are removed from the slotted members (14) by being initially tilted upwardly at the front to disengage the rib (23).

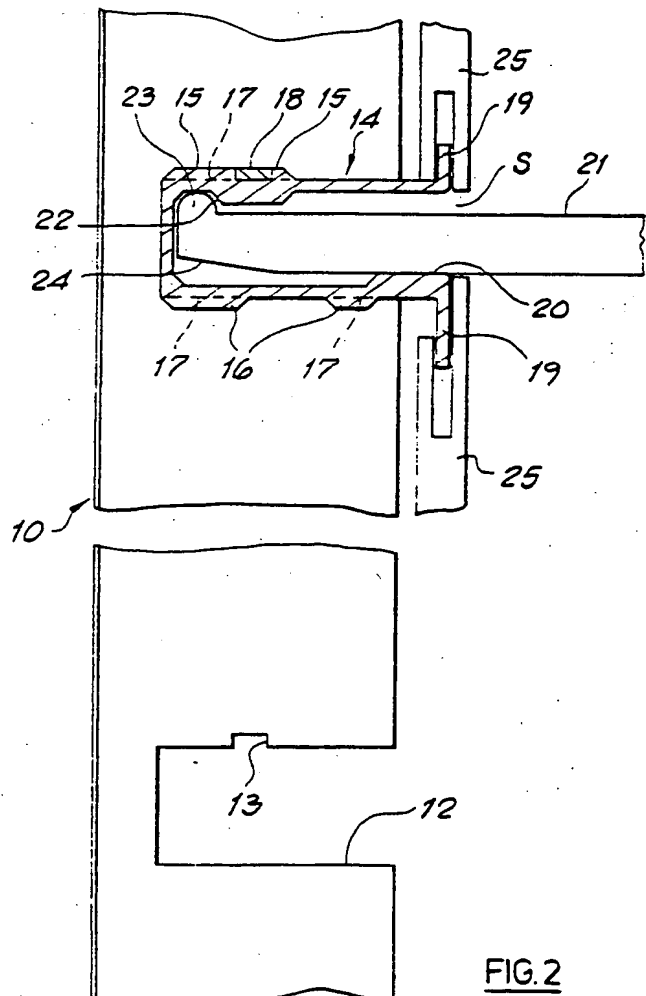
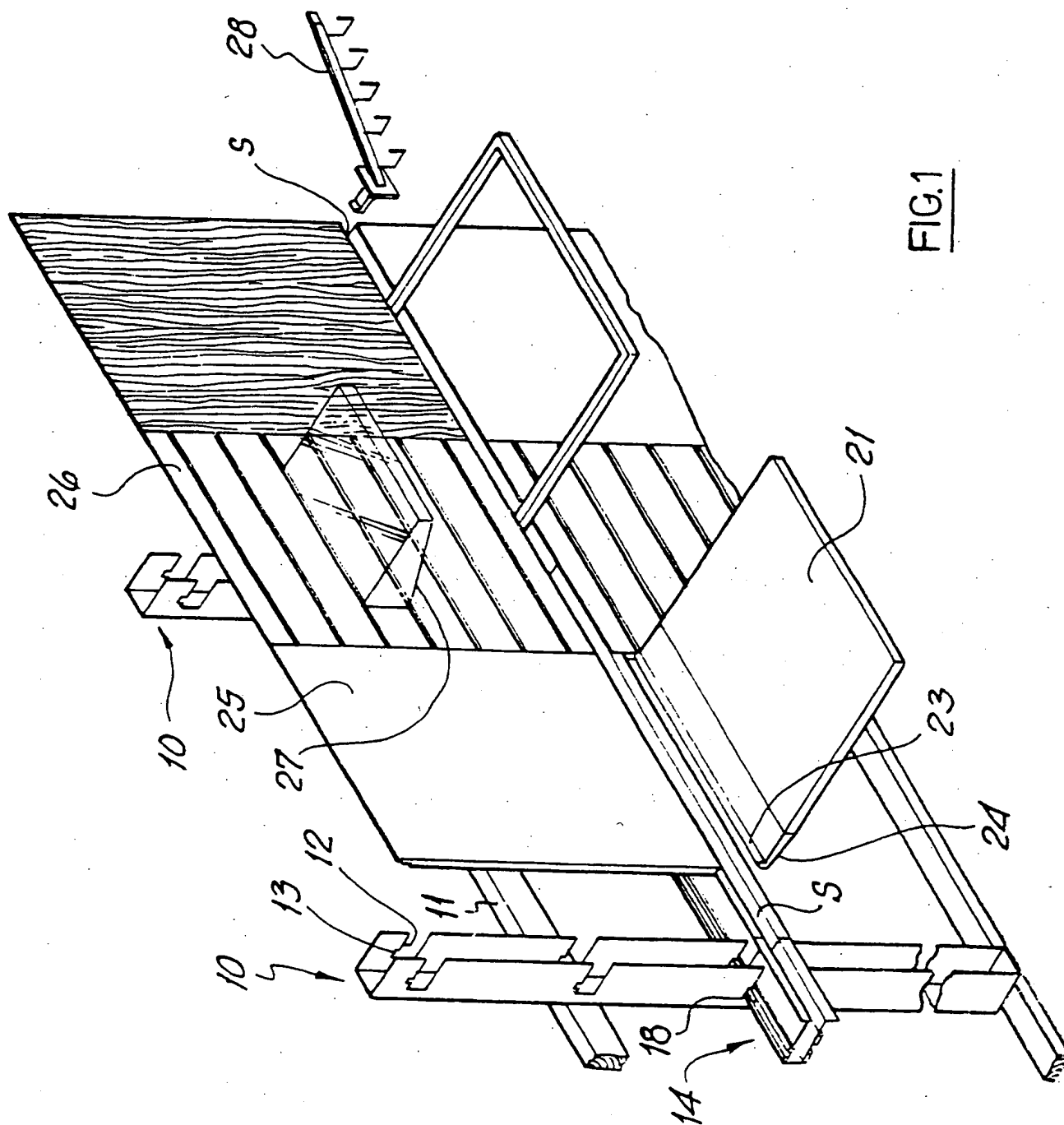


FIG. 2



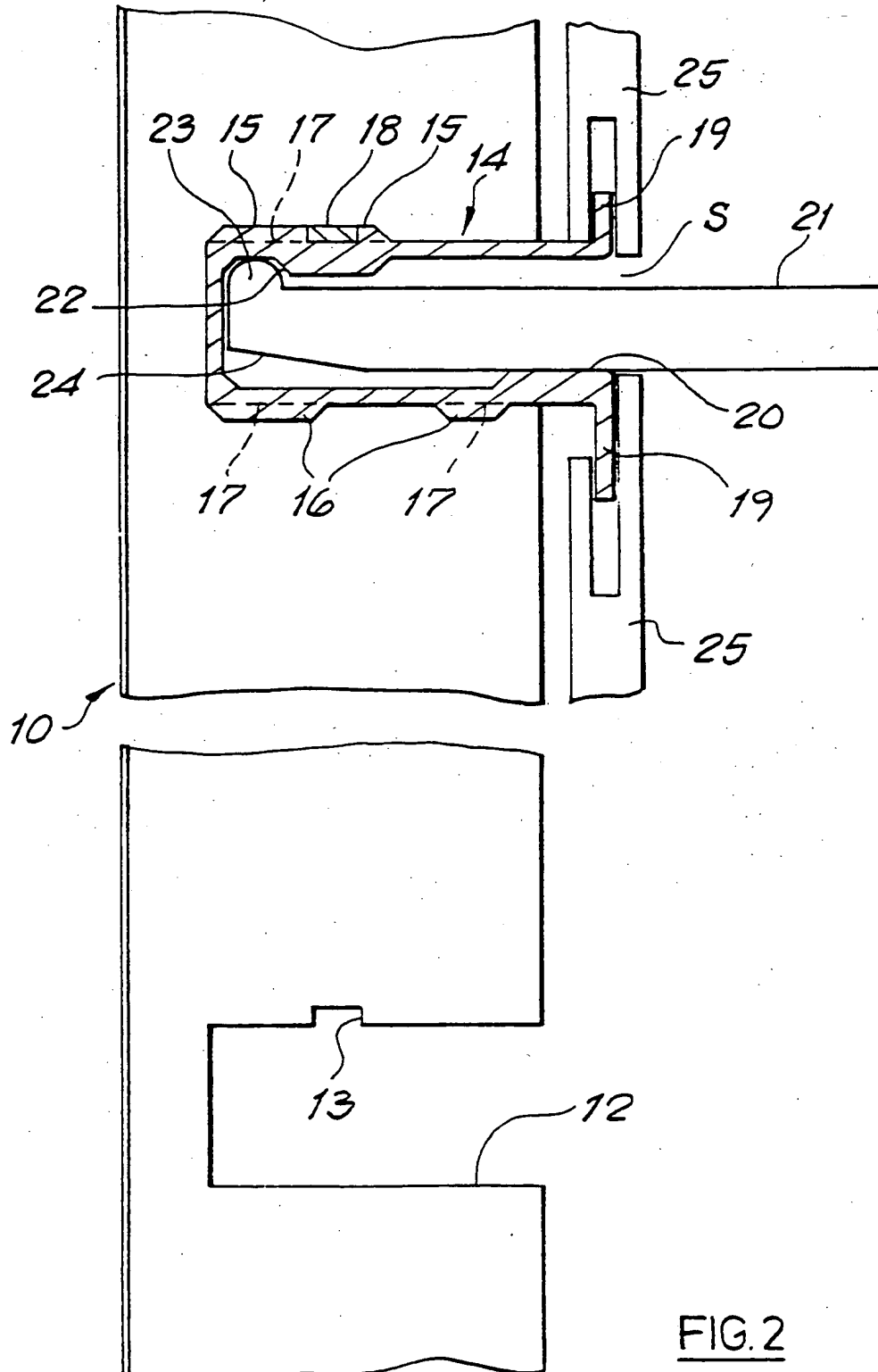


FIG. 2

A DISPLAY OR STORAGE SYSTEM

THIS INVENTION concerns display or storage systems incorporating shelves or other supporting members for merchandise or the like.

Many such systems are known which include shelves,
5 racking or partitioning (hereinafter referred to as shelves) where the shelves are to be located permanently in predetermined positions on a wall.

An object of the present invention is to provide a display or storage system in which a shelf may be supported
10 at any position along a horizontal attachment, and which enables the shelf to be readily removed, repositioned and reintroduced, and preferably the horizontal attachment may be located in any of a number of vertically spaced positions.

15 According to the present invention there is provided a display or storage system for mounting of, for example, shelves and comprising means defining a horizontally extending open-fronted slot containing a lower supporting surface adjacent the front of the slot and a
20 retaining lip projecting downwardly adjacent the rear of the slot such that a shelf having an upstanding lug or rib at or close to its rear edge may be introduced inwardly and downwardly into the slot and lowered onto the supporting

surface thereof with said lug or rib located behind the retaining lip thereof.

Preferably, the thickness of the shelf adjacent its rear edge will be tapered by chamfering the under
5 surface thereof to enable the shelf to be easily introduced into the slot at an inclined angle.

In a complete system made in accordance with the invention, a plurality of horizontal slotted strips are removably supported at vertically spaced positions by a
10 plurality of horizontally spaced vertical channel members which may be screwed or otherwise attached to a vertical wall, or standing upright on the floor.

An embodiment of the invention will now be described by way of example only, with reference to the
15 accompanying drawings in which:-

Fig. 1 is a perspective view of a wall mounted shelving and display system made in accordance with the invention and having a number of shelves or other supporting members attached to the system for display of
20 merchandise;

and Fig. 2 is an enlarged vertical section illustrating the construction and method of assembly of the component parts thereof.

The system comprises a plurality of spaced vertical channel members 10 which can be screwed or otherwise attached, by way of battens 11 to a vertical wall. The sides of each channel member 10 are cut away to
5 present vertically spaced, open-fronted slots 12 spaced apart, for example, by a distance of some 300mm. Each slot 12 contains in its upper edge a rectangular recess 13 for a purpose to be described.

The system further comprises a plurality of strips
10 14 preferably of extruded aluminium, each defining an open fronted slot S whose height and depth are approximately 25mm and 75mm respectively. The upper surface of each strip 14 carries a pair of longitudinally extending parallel ribs 15, whilst on the underside of the strip
15 there are a pair of strengthening ribs 16. Ribs 15 and 16 have transverse grooves 17 for positioning the strips 14 within slots 12. Once inserted they are retained in the slots 12 by steel or aluminium locking strips 18 introduced between ribs 15 into recesses 13.

20 The strip 14 carries upwardly and downwardly extending front lips 19 respectively.

At the front of slot S, its floor is raised to present a supporting surface 20 for a shelf 21. The

surface 20 extends some 18mm rearwardly into the slot. Adjacent but spaced from the rear of the slot S, its ceiling projects downwardly to form a retaining lip 22.

As can be seen from Fig. 2 the shelf 21 having an
5 upstanding rib 23 along its rear edge, may be introduced into slot S, the rib 23 passing beneath retaining lip 22, whereupon the shelf is lowered to rest upon supporting surface 20 with rib 23 located behind the retaining lip 22, to prevent the shelf from being withdrawn horizontally
10 from the slot.

In the rear edge region the shelf 20 is of tapered thickness by means of a chamfered lower surface 24 for ease of introduction of the shelf into the slot S. Removal is effected easily by tilting the shelf upwardly and
15 withdrawing forwardly from the slot.

In a typical display system decorative front panels 25 having horizontally slotted upper and lower edges may be located on and retained by lips 19 of strip 14. With the shelves removed these panels may be lifted away
20 from the upper lip 19 for introduction and removal. Plain panels 25 may be replaced by horizontally slotted panels such as are illustrated at 26 to carry individual shelving or racking members or display containers, such as illustrated at 27.

In place of shelves 21 a belt or tie rack or other device such as illustrated at 28 may be retained by horizontal strips 14.

Thus a display system may be readily built up and
5 dismantled or changed at will to suit particular requirements.

The vertical channels 10 may be made also from extruded aluminium or, for economy, mild steel. Alternatively, the entire assembly of vertical members 10
10 and horizontal strips 14 may be of a rigid or semi-rigid plastics material.

It is not intended to limit the invention to the above example only. For example, the front panels 25, 26 may be omitted or replaced by other members which may be
15 attached differently to strips 14 or directly to channel members 10.

It will be appreciated that the double-walled configuration of channel members 10 enables strips 14 to be joined in horizontal succession along a display area.

CLAIMS

1. A display or storage system having shelves and comprising means defining a horizontally extending open-fronted slot containing a lower supporting surface adjacent the front of the slot and a retaining lip projecting downwardly adjacent the rear of the slot such that a shelf having an upstanding lug or rib at or close to its rear edge may be introduced inwardly and downwardly into the slot and lowered onto the supporting surface thereof with said lug or rib located behind the retaining lip thereof.
2. A display or storage system according to Claim 1, wherein the thickness of the shelf adjacent its rear edge is tapered by chamfering the under surface thereof for ease of introduction of the shelf into the slot whereby the shelf may be introduced into and removed from the shelf by tilting same upwardly until the upstanding lug or rib on the shelf may pass beneath the downwardly projecting retaining lip in the slot.
3. A display or storage system according to Claim 1 or Claim 2, including a plurality of horizontally slotted strips removably supported at vertically spaced positions between vertical channel members which may be screwed or otherwise attached to a vertical wall, or stand upright on the floor.

4. A display or storage system according to Claim 3, wherein the sides of each vertical channel member are cut away to present vertically spaced, open fronted slots to receive said horizontally slotted strips.

5 5. A display or storage system according to Claim 4, wherein the upper surface of each slotted strip carries a pair of upstanding ribs between which a locking strip is inserted to engage also a corresponding recess in the vertical channel members thus to prevent the strips from
10 inadvertent removal therefrom.

6. A display or storage system according to Claim 3, wherein each horizontal slotted strip includes at least one retaining lip for the engagement of a front panel extending vertically from at least one edge of the slotted strip.

15 7. A display or storage system according to Claim 3, wherein each horizontal slotted strip carries on its underside a pair of spaced longitudinal strengthening ribs.

8. A display or storage system according to Claim 2, wherein said lower supporting surface is provided by a
20 raised portion of the floor of each slotted strip.

9. A display or storage system substantially as hereinbefore described with reference to and as illustrated

in the accompanying drawings.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.